

REMARKS

This paper is in response to the official action dated November 22, 2006 (hereafter, "the official action"). This paper is timely-filed as it is accompanied by a petition for an extension of time to file in the third month and a check covering the requisite fee of \$1020.00.

Claims 1, 4-6, 8-11, 13, and 14 are pending. By the foregoing, claim 1 has been amended to recite the limitation of claim 4, claim 13 has been amended to be in independent form, and claim 4 has been canceled. No new matter has been added.

Claims 1, 5, 6, 8-11, 13, and 14 remain at issue.

Claims 1, 4, 5, 8, and 9 have been rejected under 35 U.S.C. §102(e) as anticipated by U.S. Publication No. 2004/0086709 to Hammond Cunningham *et al.* ("Hammond Cunningham"). Claim 6 has been rejected under 35 U.S.C. §103(a) as obvious over Hammond Cunningham in view of applicant's (alleged) admitted prior art ("AAPA"). Claim 9, 10, and 11 have been rejected under 35 U.S.C. §103(a) as obvious over Hammond Cunningham. Claims 13 and 14 have been rejected as obvious over Hammond Cunningham in view of U.S. Publication No. 2003/0215723 to Bearinger *et al.* ("Bearinger").

The various bases for the claim rejections are addressed below in the order presented in the official action. Reconsideration of the application is solicited in view of the following remarks.

CLAIM REJECTIONS – 35 U.S.C. §102

Claims 1, 5, 8, and 9

Claims 1, 5, 8, and 9 have been rejected under 35 U.S.C. §102(e) as anticipated by Hammond Cunningham.¹ The applicant respectfully traverses the rejections.

It is well-established that each and every limitation of a claimed invention must be present in a single prior art reference in order for anticipation to occur. *See*, for example, *C.R. Bard, Inc. v. M3 Systems, Inc.*, 157 F.3d 1340, 1349 (Fed. Cir.

¹ Claim 4 has been canceled and thus the rejection of this claim is moot.

1998). The standard for anticipation is one of strict identity. This standard has not been satisfied with respect to claims 1, 5, 8, and 9, as presented herein.

Hammond Cunningham “relates generally to the patterning of polymer multilayers by the direct transfer of a fully formed multilayer film using a stamp.” See Hammond Cunningham at paragraph 0051. “One advantage of the multilayer-stamping method is that the multilayer is transferred in its entirety to the substrate....” *Id.* at paragraph 0051. The transfer of the multilayer can be confirmed using atomic force microscope measurements. See, for example, Hammond Cunningham at paragraphs 0065-0067.

In contrast, claims 1, 5, 8, and 9 recite a method for patterning a device layer using a patterned stamp, *wherein the topography of the surface of the substrate is unchanged after the patterned stamp has been brought into contact with the substrate.* The present specification explains that “the substrate is unchanged, particularly substantially or completely unchanged, after the patterned stamp has been brought into conformal contact with the substrate in step (2). This is measurable by atomic force microscope (AFM) measurements.” See the present application at the paragraph bridging pages 11 and 12.²

In view of the above, the applicant respectfully submits that the anticipation rejections of claims 1, 5, 8, and 9 over Hammond Cunningham have been overcome and should be withdrawn.

CLAIM REJECTIONS – 35 U.S.C. §103

Claims 6, 9, 10, and 11

Claims 6, 9, 10, and 11 have been variously rejected under 35 U.S.C. §103(a) as obvious over Hammond Cunningham. The applicant respectfully traverses the rejections of claims 6, 9, 10, and 11 in view of the above comments concerning Hammond Cunningham.

Additionally, the applicant objects to the examiner’s characterization of the paragraph bridging pages 14 and 15 as admitted prior art.

² Reference is made to the application as filed (and not the U.S. Patent Publication corresponding thereto).

Claims 13 and 14

Claims 13 and 14 have been rejected as obvious over Hammond Cunningham in view of U.S. Publication No. 2003/0215723 to Bearinger *et al.* ("Bearinger"). The applicant respectfully traverses the rejections.

Because Hammond Cunningham fails to disclose "wherein the patterned stamp is used as a mask in step (b) and step (b) includes subjecting any portion of the surface of the substrate that is not in contact with the patterned stamp to a surface energy modifying process," the examiner turned to Bearinger for its disclosure of a "method of patterning a surface by exposing the surface through a stamp, while said stamp is in contact with the surface, in order to modify the surface for patterning." See the official action at page 5.

Bearinger has an earliest effective U.S. filing date of April 19, 2002, and is merely prior art under 35 U.S.C. §102(e). Thus, the applicant can antedate Bearinger by submitting a suitable 37 C.F.R. §1.131 declaration and an accompanying evidentiary showing.

A suitable declaration of inventor Xiangjun Wang pursuant to 37 C.F.R. §1.131 ("the Rule 131 declaration") and accompanying evidentiary showing are filed herewith. These papers demonstrate that the patterning methods, as recited in claims 13 and 14 of the patent application, were conceived in a WTO country at least as early as April 19, 2002, and subsequent to December 31, 1995. These papers also demonstrate that the applicant diligently worked with patent counsel toward filing a patent application with the Great Britain Patent and Trademark Office from a time at least as early as April 19, 2002, until the priority application filing date of July 9, 2002.

The undersigned redacted the evidentiary showing subsequent to the inventor's execution of the Rule 131 declaration in order to remove sections not relevant to claims 13 and 14.

In view of the above, it is respectfully submitted that the obviousness rejections of claims 13 and 14 over Bearinger have been overcome and should be withdrawn.

CONCLUSION

It is respectfully submitted that this application is now in condition for allowance. Should the examiner wish to discuss the foregoing, or any matter of form or procedure in an effort to advance this application to allowance, he is respectfully invited to contact the undersigned attorney at the indicated telephone number.

Respectfully submitted,

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